

COLOR CONSISTENCY TECHNICAL BULLETIN

Color Consistency

Arconic Architectural Products LLC (AAP) is aware that finish performance and color consistency are of utmost importance to its customers. Painted Reynobond® and Reynolux® panels are coated in a coilcoating process with the most durable coatings available for the building and construction industry. Coilcoating offers excellent coverage, uniformity and durability in a coating. Yet, due to this process and to the composition of some of our finishes, variances in color can and do occur and are visible to the human eye. Moreover, industry tolerances for the coil coating help ensure minimal variations within a specific color finish.

Color Families

Some time ago, AAP internally implemented a color family process for all of its Colorweld® 500 finishes for Reynobond® panels. AAP's Quality Control department reviews each painted coil by color and establishes which color family it matches, or creates a new color family for it if needed. This process has greatly improved AAP's ability to match new orders with previous orders as well as with orders containing multiple widths.

Directionality

General Rule – Install panels with directional arrows pointing in the same direction.

Explanation – Paint is applied to Reynobond® and Reynolux® panels by a reverse-roll coating process. As the coil of aluminum is unwound through the line, the roller applies the colored coating across its width. Due to the movement of the metal across the roller, coatings may display some directionality. Directionality is most noticeable in mica and metallic finishes. Mica and metallic flake paint systems have properties that reflect, refract and absorb light. The angle that light strikes the surface of the Reynobond® panel versus the visual angle strongly influences the viewer's perceived color. Mica paints refract light, and the highest refraction occurs when the light is near 90° to the panel surface. Metallic paints reflect light, and contain metallic flakes which all settle in a preferred direction based upon the coil-coating process. The perceived reflectance is least when the light strikes closest to 90° from the panel surface. Paints containing both mica and metallic flakes can appear to change color and lose brightness depending on the light source's incident angle.

Best Practice – It is always necessary to install panels in the same direction on a building's surface.

Batch Variances

General Rule – Notify AAP when ordering panels to match to a previous order.

Explanation – Although there are tolerances in place for the range of color variation within a specific color, these tolerances allow for variations that are noticeable to the human eye. AAP has implemented a color family inventory system (see below) to identify matching panels within a specific color. It is important that customers notify AAP when their order is to be used on the same building as a previous order.

Best Practice – Order all panels at the same time for each project.

Multiple Widths

General Rule – Verify colors match when ordering different widths for the same project.

Explanation – Different width coils will likely be painted at different times, and may utilize different batches of paint. AAP classifies its color finishes by color family in an attempt to provide the closest visual match possible. AAP will do its best to ensure that colors of different widths come from the same color family, when both widths are to be used on the same building surface.

Best Practice – Order the same color in the same width for each project.



Technical Bulletin

Multiple Releases

General Rule – Notify AAP if your project will have multiple releases of the same color finish.

Explanation – AAP will establish a color family for your project when necessary. Please note that this may present a challenge if the releases are far apart. When ordering for multiple releases, it is best to separate different orders on the actual installation site. This will help minimize the effect of any color variations that may occur.

Best Practice – Order all at once or order based on elevation/plane segregation.

Reynolux Profile & Flashing Sheets

AAP was the first to offer matching profiles and flashing sheets. While AAP works closely to get the best color match between its Reynolux® profiles and flashing sheets to its Reynobond® panels, there can be slight variances from batch to batch. Since Reynolux® profiles and flashing sheets are used in different applications and planes of projects, color variation will typically not present a visual issue.

Post Painting Extrusion etc.

Rule – Spray-finishing typically cannot recreate the directionality inherent to coil-applied finishes.

Explanation – AAP can provide paint manufacturer spray applied PVDF formulations that align with its standard finishes. However, post-painting panels with a spray system inevitably will have a different appearance than the original coil-applied finish. Moreover, differences in batches may intensify that variation between the original and the spray-applied finish. It is good practice to have the paint applicator base the finish off of a sample of a Reynobond® panel from the specific batch that one is matching.

Best Practice – Use a sample from the specific batch that one is attempting to match, when post-painting to match.

Disclaimer

Laws and building and safety codes governing the design and use of AAP's products, and specifically aluminum composite materials, vary widely. It is the responsibility of the owner, the architect, the general contractor, the installer and the fabricator/transformer, consistent with their roles, to determine the appropriate materials for a project in strict conformity to all applicable national, regional and local building codes and regulations. REYNOBOND® FR AND AS3000B HAVE SUCCESSFULLY PASSED US NFPA 285, E84 AND CANADA S134, S102 TESTS AS A PART OF AN ASSEMBLY. ENSURE THE PRODUCT IS USED IN A SYSTEM THAT COMPLIES WITH ALL APPLICABLE REGULATIONS. REYNOBOND® PE IS COMBUSTIBLE; IT COULD CATCH FIRE AND BURN. ANY LABORATORY TESTING INFORMATION PROVIDED BY AAP LLC APPLIES ONLY TO THE PARTICULAR PRODUCT OR ASSEMBLY TESTED AND DOES NOT NECESSARILY REPRESENT HOW PRODUCTS WILL ACTUALLY PERFORM IN USE. REPORTS AND TEST DATA CORRESPONDING TO A PARTICULAR TESTED PRODUCT SAMPLE OR ASSEMBLY ARE NOT A GUARANTEE THAT THE SAME PRODUCT OR ASSEMBLY WOULD ALWAYS ACHIEVE THE SAME TEST RESULT.

ARCONIC ARCHITECTURAL PRODUCTS LLC

50 Industrial Boulevard
Eastman, GA 31023-4129
Tel. 800 841 7774
www.reynobond.com
EC 99603-010

